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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,684	03/26/2004	Yang Gi Kim	LT-0055	7870

34610 7590 03/17/2008

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EXAMINER	
BRINEY III, WALTER F	
ART UNIT	PAPER NUMBER
2615	
MAIL DATE	DELIVERY MODE
03/17/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/809,684	KIM ET AL.	
	Examiner	Art Unit	
	WALTER F. BRINEY III	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 December 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,4,6,8,10-15,17,18,20-24 and 27-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *20-24 and 27-30* is/are allowed.

6)☒ Claim(s) *1,3,4,6,8,10,11,13-15,17 and 18* is/are rejected.

7)☒ Claim(s) *12* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 14-15, 17 and 18 are directed to non-statutory subject matter.

Claims 14-15, 17 and 18 are limited to machine-readable storage mediums. The *mediums* intended by the applicant apparently include code segments transported over a carrier wave, which is not tangible. Specification at ¶ 52 (26 March 2004). Therefore, these claims are non-statutory.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3-4, 6, 8 and 10-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Replay Gain – A Proposed Standard, http://www.replaygain.org (retrieved 06 August 2007) (last updated 10 October 2001) (herein *Replay Gain*).

Claim 1, as instantly amended, now includes the limitations of claims 2 and 5. So (1) the claimed audio file is partitioned into a header information area, an audio data area and a tag information area; (2) audio level information is recorded in the tag information area, the audio level information indicating an output level of audio data to be reproduced; and (3) audio level

flag information is recorded in the header information area, the audio level flag information indicating whether the audio level information has been recorded in the tag information area.

Replay Gain discloses a simple way of calculating and representing the ideal replay gain for every track and album. The replay gain is stored in the metadata portion of an MP3 file, also known as the ID3v2 tag. See *Replay Gain* at § Introduction. *Replay Gain* at § Replay Gain Data ¶ Bit format discloses the format for storing replay gain adjustment values along with name codes in an ID3v2 tag. The name code section corresponds to the claimed header information area while the gain adjustment value section corresponds to the claimed tag information area. The MP3 audio associated with the ID3v2 tag corresponds to the claimed audio data area. The inherently present process required to create an MP3 according to *Replay Gain* evinces the claimed partitioning step since an MP3 created according to *Replay Gain* has the three sections of the claimed audio file.

The replay gain adjustment value stored is actually the difference between the level of the audio data and a standard volume of 83 dB. *Id.* at § Calibration. Since the difference value controls the output level of audio data to be reproduced, recording this difference in the ID3v2 tag corresponds to the claimed step of recording an audio level information in said second information area of an audio file, said audio level information indicating an output level of audio data to be reproduced. As indicated in *Replay Gain* at § Replay Gain Data Format, the name code information indicates whether a replay gain adjustment value has been set/recorded just like the claimed audio level flag information indicates if audio level information has been recorded in the tag information area. Therefore, claim 1 is rejected as anticipated by *Replay Gain*.

Claims 3 and 4 are instantly amended, but only to address minor formalities not affecting the scope of the claims. These claims are rejected according to the reasons set forth *supra* apropos claim 1. The further limitations recited in these claims are rejected according to the rejections of claims 3 and 4 in the Non-Final Rejection at p. 4 (09 August 2007) incorporated herein by reference. Therefore, claims 3 and 4 are rejected as anticipated by *Replay Gain*.

Claim 6 is limited to a method. Applicant amended this claim to include the limitations of claims 7 and 9, to wit, the details of the audio file. According to the rejection of claim 1 *supra*, *Replay Gain* separates an MP3 file/audio file into a header information area with an audio level information flag, audio data area, and a tag information area with audio level information. *Replay Gain* discloses reproducing the separated MP3 file in a media player, like Winamp, where reproduction inherently requires receiving a file in the application's memory space. *Replay Gain* at § Outline of Player Requirements (picture of Winamp window playing back a song). *Replay Gain* discloses reading the replay gain value stored in the tag area of the MP3, which reading corresponds to checking audio level information recorded in the received audio file. *Id.* *Replay Gain* discloses scaling the MP3 audio data in accordance with the read replay gain value, which scaling corresponds to the claimed adjusting of an output level of audio data to be reproduced on the basis of checked audio level information. *Id.* Therefore, claim 6 is rejected as anticipated by *Replay Gain*.

Claims 8 and 10-11 are instantly amended, but only to address minor formalities and to make the use of names in claims 8 and 10-11 consistent with the use of names in claim 6. These claims are rejected according to the reasons set forth *supra* apropos claim 6. The further limitations recited in these claims are rejected according to the rejections of claims 8 and 10-11

in the Non-Final Rejection at p. 5 incorporated herein by reference. Therefore, claims 8 and 10-11 are rejected as anticipated by *Replay Gain*.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 13-15 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Replay Gain website in view of screenshots taken from Winamp V2.6.

Claim 13 is instantly amended, but only to address minor formalities and to make the use of names in claim 13 consistent with the use of names in claim 6. This claim is rejected according to the reasons set forth *supra* apropos claim 6. The further limitations recited in this claim are rejected according to the rejections of claim 13 in the Non-Final Rejection at p. 10 incorporated herein by reference. Therefore, claim 13 is rejected as anticipated by *Replay Gain* in view of *Winamp*.

Claim 14 is limited to an article including a machine-readable storage medium containing instructions fro adjusting an output level of audio data. Since Replay Gain is software, as evidenced by the Matlab reference code seen on the MATLAB files page, it follows that said machine-readable storage medium exists to store the Replay Gain software. The remaining limitations were treated *supra* apropos the rejections of claims 6 and 13. Therefore, claim 14 is rejected as anticipated by *Replay Gain* in view of *Winamp*.

Claims 15 and 17-18 are instantly amended, but only to address minor formalities and to make the use of names in claims 15 and 17-18 consistent with the use of names in claim 6. These claims are rejected according to the reasons set forth *supra* apropos claim 6. The further limitations recited in these claims are rejected according to the rejections of claims 15 and 17-18 in the Non-Final Rejection at pp. 11-13 incorporated herein by reference. Therefore, claims 15 and 17-18 are rejected as anticipated by *Replay Gain*.

Allowable Subject Matter

The following is a statement of reasons for the indication of allowable subject matter:

3. Claim 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 12 is objected to for the reasons set forth in the Non-Final Rejection at pp. 16-17.

4. Claims 20-24 and 27-30 are allowed

Claims 20 and 27 were instantly amended to include the allowable limitations of claims 26 and 32, respectively, as well as all limitations of any interceding claims. Therefore, claims 20 and 27 are allowable over the cited prior art.

Claims 21-24 and 28-30 are allowable based on their dependence from allowable claims 20 and 27.

Response to Arguments

Applicant's arguments apropos claims 1, 3-4, 6, 8, 10-15, 17 and 18 have been fully considered but they are not persuasive. Applicant alleges that claims 14-15, 17 and 18 are no longer directed to non-statutory subject matter because the term "article" was removed.

Arguments at p. 13 (05 December 2007). The 35 USC § 101 rejections of claims 14-15, 17 and 18, however, were based on applicant's definition of machine-readable storage medium as a carrier wave. Non-Final Rejection at p. 2; Specification at ¶ 52. To overcome this 101 rejection, applicant ought to amend the Specification to expressly distinguish machine-readable storage mediums from carrier waves.

Regarding claim 1, applicant argues that *Replay Gain* does not disclose storing track relative volume adjustments in a tag information area, but a header information area. Arguments at p. 15. Applicant's argument is one determined by looking to claim construction and interpretation of the prior art. Claim 1 requires a header information area and a tag information area. The header information area stores audio level flag information and the tag information area stores audio level information. The applicant uses the term header throughout the Specification and Claims in a conventional manner: a header logically precedes other data stored in a file. Specification at ¶ 27 ("as shown in Fig. 3, an audio level information recording indicator or flag…recorded in the header information of the MP3 audio file"); Drawings at fig.3 (26 March 2004) (MP3 audio file structure with a header followed by a MP3 audio data and then a tag). The applicant also uses the term tag in a conventional manner: the tag includes information about the file's contents, such as title, singer and audio level. Drawings at fig.3. The tag follows the header and audio data, but applicant does not indicate that this arrangement of data is either intentional or necessary. *Id. Replay Gain* discloses the use of an ID3v2 tag for storing a track relative volume adjustment/replay gain adjustment. *Replay Gain* at §§ Introduction, Replay Gain Data Format. The bit format used in *Replay Gain* requires two bytes: the first three bits indicate a name code, the second three bits indicate an originator code, the

next is a sign bit and the last ten bits are for the replay gain adjustment. *Id.* The applicant's argument focuses on the following disclosure of *Replay Gain*, to wit, the two bytes are stored in a file header. *Id.* So *Replay Gain* appears to define the replay gain adjustment as a tag that is stored with attendant control data, like a name code, within a file header. The replay gain adjustment is in a header, but is like the claimed tag based on the similarity between the replay gain adjustment and the claimed audio level information; so the memory the replay gain adjustment occupies is a *de facto* tag information area within the file header. Because applicant did not specify that the tag should or has to follow the audio data, applicant has failed to persuasively argue that claim 1 is allowable over *Replay Gain*. Because applicant's argument is unpersuasive, applicant's reliance on the argument is unpersuasive apropos claims 3-4, 6, 8, 10-15 and 17-18.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WALTER F. BRINEY III whose telephone number is (571)272-7513. The examiner can normally be reached on M-F 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/wfb/
3/15/08

/Sinh N Tran/
Supervisory Patent Examiner, Art Unit 2615